

Title (en)

INTERNAL COMBUSTION ENGINE

Title (de)

VERBRENNUNGSMOTOR

Title (fr)

MOTEUR A COMBUSTION INTERNE

Publication

**EP 1934443 B1 20131218 (EN)**

Application

**EP 06744383 A 20060602**

Priority

- GR 2006000027 W 20060602
- GR 20050100405 A 20050801

Abstract (en)

[origin: WO2007015114A1] An engine with expansion piston located on the end of a motion arm connected to the engine shaft. On the shaft, rotating compression pistons are mounted. The distance between the two piston types allows for the production of great torque. The geometry of expansion chamber and compression chamber is concentric toroidal. A pressure chamber stores the air-fuel mixture coming from the compression chamber to the expansion chamber and is therefore interposed between the two. The timing of the two or more sliding ports attached to the compression chambers determines the compression volume, while the valves control the communication of the pressure chamber with the other chambers.

IPC 8 full level

**F02B 53/08** (2006.01); **F01C 1/00** (2006.01); **F02B 55/00** (2006.01)

CPC (source: EP KR US)

**F01C 1/00** (2013.01 - KR); **F01C 1/356** (2013.01 - EP US); **F01C 11/004** (2013.01 - EP US); **F02B 53/08** (2013.01 - KR);  
**F02B 55/00** (2013.01 - KR); **F03C 2/304** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2007015114 A1 20070208**; AU 2006274692 A1 20070208; AU 2006274692 B2 20120705; CA 2615910 A1 20070208;  
CN 101233307 A 20080730; CN 101233307 B 20110216; EP 1934443 A1 20080625; EP 1934443 B1 20131218; JP 2009503361 A 20090129;  
KR 20080033482 A 20080416; RU 2008105208 A 20090910; RU 2430247 C2 20110927; US 2008196688 A1 20080821;  
US 8001949 B2 20110823

DOCDB simple family (application)

**GR 2006000027 W 20060602**; AU 2006274692 A 20060602; CA 2615910 A 20060602; CN 200680028091 A 20060602;  
EP 06744383 A 20060602; JP 2008524601 A 20060602; KR 20087005037 A 20080229; RU 2008105208 A 20060602; US 99651206 A 20060602